

Mr. Chairman and members of the committee. For the record Debbie Shea with the Montana Mining Association.

The mining community has worked with the state of Montana over the last several decades to insure safety, a healthy environment, as well as a healthy economic climate for the state of Montana. And these efforts have included permit requirements. Our cooperation and partnership in this endeavor has been significant and well defined in Code.

So taking mining out of the ground water exemptions in 75-5-4-1, in lieu of our commitment to specific controls in law is very unsettling.

Of great concern is the implication to mineral exploration projects. Part of exploration includes establishing a road which in fact could be over the span of an acre.

Many exploration projects include drilling. This commonly involves drilling several wide spaced holes. And if in fact you start to find an ore body these wide spaced non invasive holes can be over an acre. It's highly unlikely that these types of activities would ever impact groundwater.

Nonetheless, these drilling activities have to meet a number of requirements to assure that groundwater is not impacted. These include the following requirements from the DEQ Exploration License Program Manual.

Drill cutting and mud must be contained

Petroleum products cannot be released.

DEQ can require water monitoring

All holes must be plugged after completion, and the area fully reclaimed.

A reclamation bond is required

In addition the DEQ can level fines, revoke the exploration license, and forfeit the bond if the permittee does not meet all of these requirements

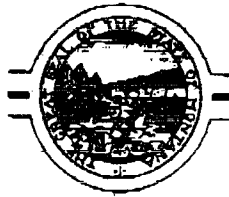
Under this legislation Oil and Gas drilling activities would continue, and rightfully so but so too should the exemption for mineral exploration drilling be continued.

Not sure the reason for this legislation but it certainly has some serious ramifications.

MONTANA HARD ROCK & PLACER EXPLORATION LICENSE PROGRAM MANUAL

**REQUIREMENTS, POLICIES, PROCEDURES
AND
GENERAL INFORMATION**

Second Edition



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- k) If roads are to be used during the winter (snow) season, insloping with proper drainage consideration is acceptable for vehicle safety reasons. Snow plowing must be done in such a manner that runoff water will not be trapped between the snow berms and flow down the road.
- l) Materials which slough or slump onto the road bed or into the roadside drainage ditch before the licensee completes the exploration project must be disposed of on the road bed or on the fill material in a manner that will not obstruct any of the drainage facilities previously described.
- m) All cut-and-fill slopes, with the exception of rock faces, must be seeded with an approved, rapidly-growing seed mixture during the first appropriate season following construction of the road. This requirement may be waived under specific circumstances as determined by DEQ or applicable state or federal land-management agency.
- n) Streams must be crossed at or near right angles unless contouring down to the stream bed will result in less potential stream bank erosion. Structure or ford entrances and exits must be constructed to prevent water from flowing down the roadway.
- o) Drill sites, trenches, discovery pits and other excavations may *not* be constructed in perennial, intermittent or ephemeral stream channels.
- p) Spoil from pits, trenches, shafts, adits, or other excavations may not be located in drainageways. The lower edge of the spoil bank must be at least 50 linear feet from any perennial or intermittent stream channel.

3. Specific Operational Requirements

- a) Drilling mud, cuttings, water and other fluids from drilling operations *must* be confined to the drill site by the use of storage tanks or sumps.
- b) Oil, grease, hydraulic fluid and other petroleum products must not be released on the exploration site or down the drill hole. If an accidental spill occurs, the contaminated material must be removed immediately and disposed of at a proper disposal site. Licensees (or their contractors) must keep absorbent material on hand in case a spill occurs.

- c) If an artesian aquifer is intercepted during a drilling operation, the drill hole will be plugged at depth (top to bottom) *prior to removal of the drill rig*. If the artesian hole is flowing, the licensee must notify DEQ's Hard Rock & Placer Exploration Section within 24 hours.
- d) Exploration adits, shafts, and other potentially dangerous excavations must be secured from unauthorized entry throughout the life of the operation to ensure public, wildlife and livestock safety.
- e) Pilot ore processing plants or sites and associated laboratory facilities permitted under an Exploration License are subject to all applicable quality assurance and quality control practices required of full-scale mineral-processing operations.
- f) The requirements of the Montana Water Quality Act must be fulfilled if a discharge occurs, or is likely to occur, as a result of the exploration activity.
- g) All garbage and other refuse must be removed from the exploration site daily (and disposed of properly) to avoid wildlife conflicts.
- h) Exploration operators *must* observe all federal, state and local fire regulations.
- i) If an exploration project is in an advanced stage and has a reasonable chance of further development into a mining project, or if the licensee has applied or intends to apply for an Operating Permit, a Small Miner Exclusion, or a Small Miner Cyanide Permit to mine the area covered under the Exploration License, representative samples of ore and waste material obtained from drill cuttings, drill core, channel cuts, road cuts, adits, shafts, or other excavations must be saved and subsequently analyzed for acid-production potential. Information obtained from these samples must then be submitted as part of the permit application.

4. **Noxious Weed Control** – During the on-site visit conducted by DEQ inspectors, any noxious weeds found in the project area as well as the degree of infestation will be noted. If the area presently contains noxious weeds, the licensee must not aggravate the situation. To the degree that the licensee has either introduced noxious weeds to a formerly weed-free area or aggravated an existing weed infestation, DEQ would hold the licensee responsible for eradication before considering bond release.

B. Drill Hole Plugging Policy

1. **General Policy** -- *all exploration drill holes must be plugged* at the surface five (5) to ten (10) feet with cement. Exploration drill holes must be plugged with bentonite or a similar compound from the bottom of the hole to within five (5) to ten (10) of the surface, and with cement from the top of the bentonite to the surface *if one or more of the following conditions apply:*

- a) two aquifers are intercepted;
- b) one aquifer is intercepted and an existing or potential beneficial use (domestic, agricultural or fish/wildlife water supply) exists;
- c) one or more artesian aquifers are intercepted causing either surface flow or significant water rise in the hole;
- d) the potential exists for downward water loss from an aquifer (cascade effect) as determined by DEQ or other appropriate regulatory agency, or
- e) the area will likely be mined and/or the drill holes are in an area potentially suitable for location of a tailing impoundment, process ponds, leach pads or a mill/plant facility.

2. **Exceptions** -- Exceptions may be granted by DEQ and/or other appropriate regulatory agencies for certain circumstances. For example, if an operator drills holes in a pioneered exploration road that will be fully reclaimed (pulled back to contour) as soon as drilling is completed, and all of the holes are presently dry and would likely remain dry year-round based on the known hydrogeology of the area (as determined by the appropriate state and/or federal agency), hole plugging may be waived by the agencies. Another example may involve placer drill holes. Generally, if shallow placer holes are drilled using a churn or percussion drill or similar equipment in alluvium adjacent to a live stream, the holes will almost always be obliterated as the drill stem is withdrawn, leaving no evidence of the hole. Other exceptions may be made by the appropriate regulatory authority as dictated by site-specific hydrogeological and topographic situations.

3. Artesian Drill Holes

- a) **General** -- *All flowing drill holes must be plugged prior to removing the drill rig from a hole.* If an operator intercepts an artesian aquifer, but does not attempt to seal it off *before* pulling out of the hole, plugging will be extremely expensive

(~\$2,000 - \$10,000+/site) as the hole may have to be reentered (an operation that is not always possible). If the drill rig is left set up in the hole, the operator can then pump the necessary grout/sealant material into the hole through the drill stem as the stem is withdrawn.

If the flow cannot be completely stopped after all known methods have been employed, there may be other permissible alternatives such as developing the flowing hole into a spring or well. Whether or not such a post-drilling use is acceptable would depend upon several site-specific factors, including water rights, land ownership, water quality, amount of flow, the final disposition of flowing water, and compliance with all applicable local, state and federal laws.

Because of the difficulties and expense associated with plugging artesian holes, it is important for exploration operators to have some idea of the artesian potential of an area, so that they are prepared for this potential complication. In addition, it is equally important that regulators of exploration activities are aware of areas with a high artesian potential, to ensure that the drill sites in such areas are adequately bonded. It is important to point out to the company representative that he/she must relay all pertinent information to the on-site geologist or driller regarding what is required if any of the above circumstances are encountered during a drilling operation. All too often, problems are caused by a lack of communication between the individual or company holding the Exploration License (the ultimate responsible party) and the on-site contractor actually performing the work. These problems can turn out to be quite expensive.

- b) **Information & Reporting Requirements** -- In order to enhance awareness of potential artesian areas for future exploration projects and to be prepared in case the artesian hole plug fails sometime in the future, **DEQ requires all licensees to supply all pertinent information from an artesian hole.** The type of information required includes estimated flow, depth of hole, angle, bearing, diameter, and plugging method. This information must be submitted as soon as it becomes available for all artesian holes.

In all circumstances, the licensee must notify the DEQ Hard Rock & Placer Exploration Section within 24 hours (if possible) of the interception of an artesian aquifer if a surface flow occurs.

C. Monitoring Requirements

If DEQ determines that there is a reasonable potential that surface or subsurface water quality and/or quantity may be adversely affected by an exploration (or mining) operation, the operator would be required to initiate a water quality and/or water quantity monitoring program that must be approved by DEQ prior to commencement of exploration (or mining) activities.

VII. Enforcement Actions

A. Notice of Noncompliance & Order of Abatement

If a licensee or employee or contractor of a licensee violates any of the provisions of the MMRA or Rules & Regulations adopted pursuant to the MMRA, DEQ would issue the licensee a *Notice of Noncompliance & Order of Abatement (NON)*. In many instances, a subcontractor (such as a drilling company) actually commits the violation, but DEQ issues the NON to the licensee - the ultimate responsible party under the MMRA for all activities that occur under the license. Usually in these instances, the subcontractor is unfamiliar with the licensee's approved Plan of Operations on file at DEQ, and perhaps Montana requirements in general. *It is not only a good practice, but a responsibility of the licensee to ensure that his/her employees and subcontractors are familiar with the plan of operations and all applicable requirements.*

1. **NON Document** -- In general, an NON is a document that is sent via certified or registered mail (or hand-delivered by the appropriate authority) to the individual or company listed on the Exploration License. The NON document contains the following information:

- a) a noncompliance file number;
- b) the licensee's name and address;
- c) the noncompliance activity that was observed by the inspector;
- d) the location of that activity;
- e) the section(s) of the MMRA, the Rules & Regulations, and/or the condition(s) of the approved plan that was (were) violated;
- f) an abatement order (see section VII.A.2. below);
- g) a section describing the potential civil penalties (see section VII.A.3. below); and
- h) two (2) signature blocks (for the inspector and Environmental Management Bureau chief).

2. **Abatement Order** -- Included within the NON document is an abatement order, which gives the licensee a period of time to mitigate the violation. The amount of time given in an abatement order is usually dictated by the severity of the violation in terms of existing or potential environmental impacts. For example, if a licensee is issued an NON for

failing to retain drilling mud and cuttings on-site, the abatement order in that NON may require the licensee to clean up all mud and cuttings that have left the site and properly dispose of them within 30 days of receipt of the NON. Another example would be if a licensee is issued an NON for drilling within a creek, the abatement order in that NON would likely require the licensee to immediately remove the drill rig from the stream.

The licensee must promptly respond to the NON by either:

- implementing the abatement order within the allotted time limit; *OR*
- presenting DEQ with a rationale explaining why an alternative abatement is more appropriate, or why a noncompliance does not exist (also within the allotted time limit given in the NON).

3. Civil Penalties (Fines)

- a) **Amount & Recovery of Civil Penalties** – §82-4-351 MCA provides that any person or company (licensee) that violates any of the provisions of the MMRA, the Rules & Regulations governing the MMRA, or stipulations assigned to an approved exploration Plan of Operations shall pay a civil penalty of not less than \$100.00 or more than \$1,000.00 for the violation and an *additional* civil penalty of not less than \$100.00 or more than \$1,000.00 for each day that a violation continues. *If the violation created an imminent danger to the health or safety of the public, or caused significant environmental harm, the maximum penalty is increased to \$5,000.00 for each day of violation.* The actual penalty assessed for a specific NON depends on several factors found on a standardized DEQ penalty computation sheet, including: violation history of licensee, seriousness of violation in terms of actual or potential environmental damage or administrative impairment, conduct of licensee (i.e. accidental, negligent, intentional or aggravated), and good faith efforts on the part of the licensee.

These penalties are recoverable in any action brought in the name of the State of Montana by the Attorney General in the district court of the first judicial district of this state in and for the County of Lewis & Clark, or in the district court having jurisdiction over the defendant.

- b) **Waiver of Civil Penalties** – The civil penalties may be waived for a minor violation if DEQ determines that the violation does not represent potential harm to public health, public safety, or the environment and does not impair the administration of the MMRA.

B. Suspension of Exploration License

If any of the time limits for compliance set by DEQ under the authority of the MMRA have not been met (see sections VI.A.4. and VII.A.2. of this manual), DEQ could issue an **Order of Suspension** of the Exploration License. Under a suspension order, **ALL** projects under the Exploration License must cease until the violation has been sufficiently abated, the civil penalties (fines) have been paid, and the licensee is again in full compliance with the MMRA, as determined by DEQ. **Orders of Suspension** include a time limit under which the licensee must comply, or face license revocation and bond forfeiture (see section VII.C. below).

C. Exploration License Revocation & Bond Forfeiture

1. **General Procedure** – If the licensee has not complied with the requirements set forth in the **Notice of Noncompliance & Order of Abatement** or the **Order of Suspension** within the given time frames (see sections VII.A.2. and VII.B. above), DEQ would revoke the Exploration License and forfeit the reclamation performance bond. Under this scenario, the licensee would receive a **Notice of License Revocation & Bond Forfeiture** signed by the DEQ Director, and delivered via certified or registered mail, or by an appropriate courier. The licensee is entitled to a hearing before DEQ on the revocation of a license and forfeiture of a reclamation bond, providing such a hearing is requested within thirty (30) days of the date on which the notice was received or served. If the licensee requests a hearing within the 30-day time frame, DEQ would not make a final decision regarding license revocation and bond forfeiture until after the hearing.

2. Activities Prohibited if Bond Forfeited

- a) **General Provision** – Except as noted in *subsection b* below, the MMRA provides that an individual **may not** conduct exploration or mining activities within the State of Montana if the individual has previously had a bond forfeited in Montana. Similarly, a company, corporation, joint venture, or other legal entity **may not** conduct exploration or mining activities within the State of Montana if a principal or controlling member of that legal entity previously had a bond forfeited in Montana, and has not satisfied the requirements listed in *subsection b* below.
- b) **Exception** – A company or individual described in *section a* above may apply for an Exploration License or Operating Permit, or file a Small Miner Exclusion Statement if that company or individual first pays to DEQ:
 - 1) the full amount of the necessary expenses incurred by